

IN THE UNITED STATES RECEIVING OFFICE (RO/US)
Designated/Elected Office (DO/EO/US)

U.S. National Stage of
International Application No.: PCT/US2004/025937

International Filing Date: August 11, 2004

Earliest Priority Date: August 13, 2003

Applicants: Richard F. Labaudiniere, Yibin Xiang, Ravi K. Jalluri
and Anthony C. Arvanites

Title: Antibiotic Cycloalkyltetrahydroquinoline Derivatives

Attorney's Docket No.: 2709.2017-008

Date: <u>13 February 2006</u> EXPRESS MAIL LABEL NO. <u>EV21488 723245</u>

INFORMATION DISCLOSURE STATEMENT

Mail Stop Amendment
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

This Information Disclosure Statement is submitted:

- ☐ under 37 CFR 1.129(a), or
(First/Second submission after Final Rejection)
- ☒ under 37 CFR 1.97(b), or
(Within any one of the following time periods: three months of filing national application (other than a CPA) or date of entry of the national stage in an international application; or before the mailing date of a first office action on the merits in a non-provisional application, including a CPA, or a Request for Continued Examination).
- ☐ under 37 CFR 1.97(c) together with either:
- ☐ a Statement under 37 CFR 1.97(e), as checked below, or
- ☐ a \$180.00 fee under 37 CFR 1.17(p), or
(After the 37 CFR 1.97(b) time period, but before final action or notice of allowance, whichever occurs first)
- ☐ under 37 CFR 1.97(d) together with:
- ☐ a Statement under 37 CFR 1.97(e), as checked below, and
- ☐ a \$180.00 fee under 37 CFR 1.17(p), or
(Filed after final action or notice of allowance, whichever occurs first, but on or before payment of the issue fee)
- ☐ under 37 CFR 1.97(i):
Applicant requests that the IDS and cited reference(s) be placed in the application file.
(Filed after payment of issue fee)

Statement Under 37 CFR 1.97(e)

- ☐ Each item of information contained in this Information Disclosure Statement was first cited in any communication from a foreign patent office in a counterpart foreign application not more than three months prior to the filing of this Information Disclosure Statement; or
- ☐ No item of information contained in this Information Disclosure Statement was cited in a communication from a foreign patent office in a counterpart foreign application, and, to the knowledge of the undersigned, after making reasonable inquiry, no item of information contained in the information disclosure statement was known to any individual designated in 37 CFR 1.56(c) more than three months prior to the filing of this Information Disclosure Statement.

Statement Under 37 CFR 1.704(d) (Patent Term Adjustment)

Applies to original applications (other than design) filed on or after May 29, 2000

- ☐ Each item of information contained in the Information Disclosure Statement was cited in a communication from a foreign patent office in a counterpart application and this communication was not received by any individual designated in § 1.56(c) more than thirty days prior to the filing of the Information Disclosure Statement.
- ☒ Enclosed herewith is form PTO-1449:
- ☒ Copies of the cited references C1-C18 are enclosed
- ☒ Copies of issued U.S. patents and published U.S. applications are not required and are not being provided.
- ☐ Copies of the cited references are enclosed except those entered in prior application, U.S. Application No. [], to which priority under 35 U.S.C. 120 is claimed. [The earlier application contains copies of the cited references.]
- ☒ The listed references were cited in the enclosed International Search Report in PCT/US2004/025937.
- ☐ The "concise explanation" requirement (non-English references) for reference(s) [] under 37 CFR 1.98(a)(3) is satisfied by:
- ☐ the explanation provided on the attached sheet.
- ☐ the explanation provided in the Specification.
- ☐ submission of the enclosed International Search Report.
- ☐ submission of the enclosed English-language version of a foreign Search Report and/or foreign Office Action.
- ☐ the enclosed English language abstract.

- ☐ Applicant requests that the following non-published pending applications be considered:
(Affix a label or apply the stamp "Non-Published IDS Reference - Do Not Scan" to the front of each unpublished pending appl'n.)

Examiner's
Initials

_____ U.S. Patent Application No. [], by [inventor(s)], filed [], Docket No.: []
_____ U.S. Patent Application No. [], by [inventor(s)], filed [], Docket No.: []
_____ U.S. Patent Application No. [], by [inventor(s)], filed [], Docket No.: []

Examiner_____
Date

- ☐ A copy of each above-cited application, including the current claims, is enclosed, except any application filed on or after June 30, 2003, which has been scanned into the PTO's Image File Wrapper (IFW) system and is available to the examiner.
- ☐ A copy of each above-cited application, including the current claims, is enclosed, except those entered in prior application, U.S. Application No. [], to which priority under 35 U.S.C. 120 is claimed.

The Examiner is requested to return a copy of the above list of pending applications indicating which references were considered with the next office communication.

It is requested that the information disclosed herein be made of record in this application.

Method of payment:

- ☐ A check for the fee noted above is enclosed, or the fee has been included in the check with the accompanying Reply. A copy of this Statement is enclosed.
- ☐ Please charge Deposit Account 08-0380 in the amount of \$[]. A copy of this Statement is enclosed.
- ☒ Please charge any deficiency in fees and credit any overpayment to Deposit Account 08-0380.

Respectfully submitted,

HAMILTON, BROOK, SMITH & REYNOLDS, P.C.

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Dated: February 13 2006

GROUP[illegible]DATE CONSIDERED

PTO-1449 REPRODUCED INFORMATION DISCLOSURE STATEMENT IN AN APPLICATION 02/10/06 (Use several sheets if necessary)	ATTORNEY DOCKET NO. 2709.2017-008		APPLICATION NO. 10/568252	
	FIRST NAMED INVENTOR Richard F. Labaudiniere		FILING DATE	
	EXAMINER	CONFIRMATION NO.	GROUP	

OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)

C1	Baum, E. Z., <i>et al.</i> , "Identification and Characterization of New Inhibitors of the <i>Escherichia coli</i> MurA Enzyme," <i>Antimicrobial Agents and Chemotherapy</i> , 45(11):3182-3188 (2001).
C2	Kim, D. H., <i>et al.</i> , "Characterization of a Cys115 to Asp Substitution in the <i>Escherichia coli</i> Cell Wall Biosynthetic Enzyme UDP-GlcNAc Enolpyruvyl Transferase (MurA) That Confers Resistance to Inactivation by the Antibiotic Fosfomycin," <i>Biochemistry</i> , 35:4923-4928 (1996).
C3	Schönbrunn E., <i>et al.</i> , "Role of the Loop Containing Residue 115 in the Induced-Fit Mechanism of the Bacterial Cell Wall Biosynthetic Enzyme MurA," <i>Biochemistry</i> , 39(9):2164-2173 (2000).
C4	Lucchini, V., <i>et al.</i> , "Cycloaddition Reactions of Ketoimines. Part II. Synthesis of Substituted Phenanthridines and Cyclopenta[c]quinolines [1]," <i>J. Heterocyclic Chem.</i> , 23:1135-1139 (1986).
C5	DATABASE REGISTRY CHEMICAL ABSTRACTS SERVICE, COLUMBUS, OHIO, US, "3H-Cyclopenta[c]quinoline-4-carboxylic acid, 8-(aminosulfonyl)-3a, 4, 5, 9b-tetrahydro- (9CI), 17 October 2000 Database Accession No. 296243-56-6, XP002325755, abstract.
C6	DATABASE REGISTRY CHEMICAL ABSTRACTS SERVICE, COLUMBUS, OHIO, US, "3H-Cyclopenta[c]quinoline-4, 8-dicarboxylic acid, 3a, 4, 5, 9b-tetrahydro-, 8-ethyl ester (9CI), 29 August 2001 Database Accession No. 353484-61-4, XP002325756, abstract.
C7	DATABASE REGISTRY CHEMICAL ABSTRACTS SERVICE, COLUMBUS, OHIO, US, "3H-Cyclopenta[c]quinoline-4, 6-dicarboxylic acid, 3a, 4, 5, 9b-tetrahydro-, 6-(2-naphthalenyl) ester (9CI), 7 November 2002 Database Accession No. 471271-22-4, XP002325757, abstract.
C7	DATABASE REGISTRY CHEMICAL ABSTRACTS SERVICE, COLUMBUS, OHIO, US, "3H-Cyclopenta[c]quinoline-4, 6-dicarboxylic acid, 3a, 4, 5, 9b-tetrahydro-, 6-[1, 1' -biphenyl]-4-yl ester (9CI), 18 November 2002 Database Accession No. 473800-45-2, XP002325758, abstract.
C7	DATABASE REGISTRY CHEMICAL ABSTRACTS SERVICE, COLUMBUS, OHIO, US, "3H-Cyclopenta[c]quinoline-4, 8-dicarboxylic acid, 3a, 4, 5, 9b-tetrahydro-, 8-(2-naphthalenyl) ester (9CI), 21 November 2002 Database Accession No. 474085-26-2, XP002325759, abstract.
C10	DATABASE REGISTRY CHEMICAL ABSTRACTS SERVICE, COLUMBUS, OHIO, US, "3H-Cyclopenta[c]quinoline-4, 8-dicarboxylic acid, 3a, 4, 5, 9b-tetrahydro-, 8-(2-methylpropyl) ester (9CI), 22 November 2002 Database Accession No. 474263-68-8, XP002325760, abstract.

EXAMINER	DATE CONSIDERED
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PTO-1449 REPRODUCED INFORMATION DISCLOSURE STATEMENT IN AN APPLICATION 02/10/06 (Use several sheets if necessary)	ATTORNEY DOCKET NO. 2709.2017-008		APPLICATION NO. 107568252	
	FIRST NAMED INVENTOR Richard F. Labaudiniere		FILING DATE	
	EXAMINER	CONFIRMATION NO.	GROUP	

OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)		
C11	DATABASE REGISTRY CHEMICAL ABSTRACTS SERVICE, COLUMBUS, OHIO, US, "3H-Cyclopenta[c]quinoline-4, 8-dicarboxylic acid, 3a, 4, 5, 9b-tetrahydro-, 8-butyl ester (9CI), 25 November 2002 Database Accession No. 474376-39-1, XP002325761, abstract.	
C12	DATABASE REGISTRY CHEMICAL ABSTRACTS SERVICE, COLUMBUS, OHIO, US, "3H-Cyclopenta[c]quinoline-4, 8-dicarboxylic acid, 3a, 4, 5, 9b-tetrahydro-, 8-[2 (ethoxycarbonyl) phenyl] ester (9CI), 25 November 2002 Database Accession No. 474377-56-5, XP002325762, abstract.	
C13	DATABASE REGISTRY CHEMICAL ABSTRACTS SERVICE, COLUMBUS, OHIO, US, "3H-Cyclopenta[c]quinoline-4, 6-dicarboxylic acid, 3a, 4, 5, 9b-tetrahydro-, 9-nitro (9CI), 5 September 2001 Database Accession No. 354820-32-9, XP002325763, abstract.	
C14	Ahuja, S., "Chiral Separations Applications and Technology," In <i>Chiral Separations</i> , Ahuja, S., eds. (UK: Oxford University Press) Table of Contents (1996).	
C15	Ahuja, S., "Chiral Separations by Chromatography," In <i>Chiral Separations by Chromatography</i> , Ahuja, S., eds. (UK: Oxford University Press) Table of Contents (2000).	
C16	International Union of Biochemistry and Molecular Biology [online] [retrieved on 02/07/06] "retrieved from www.ebi.ac.uk/thornton-srv/databases/cgi-bin/enzymes/GetPage.pl?ec_number=2.5.1.7"	
C17	"The Science and Practice of Pharmacy," In <i>Remington's Pharmaceutical Sciences, 19th edition</i> , (Easton, PA: Mack Publishing Co.) (1995).	
C18	Skarzynski, T., <i>et al.</i> , "Structure of UDP-N-acetylglucosamine Enolpyruvyl Transferase, an Enzyme Essential for the Synthesis of Bacterial Peptidoglycan, Complexed With Substrate UDP-N-acetylglucosamine and the Drug Fosfomycin," <i>Structure</i> , 4(12):1465-1474 (1996).	

EXAMINER	DATE CONSIDERED
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